

09/926820

531 Rec'd PC... 26 DEC 2001

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<211> 1064
 <212> PRT
 <213> Mamalia

<400> 1

Met	Lys	Ile	Ala	Thr	Val	Ser	Val	Leu	Leu	Pro	Leu	Ala	Leu	Cys	Leu	1	5	10	15
Ile	Gln	Asp	Ala	Ala	Ser	Lys	Asn	Glu	Asp	Gln	Glu	Met	Cys	His	Glu	20	25	30	
Phe	Gln	Ala	Phe	Met	Lys	Asn	Gly	Lys	Leu	Phe	Cys	Pro	Gln	Asp	Lys	35	40	45	
Lys	Phe	Phe	Gln	Ser	Leu	Asp	Gly	Ile	Met	Phe	Ile	Asn	Lys	Cys	Ala	50	55	60	
Thr	Cys	Lys	Met	Ile	Leu	Glu	Lys	Glu	Ala	Lys	Ser	Gln	Lys	Arg	Ala	65	70	75	80
Arg	His	Leu	Ala	Arg	Ala	Pro	Lys	Ala	Thr	Ala	Pro	Thr	Glu	Leu	Asn	85	90	95	
Cys	Asp	Asp	Phe	Lys	Lys	Gly	Glu	Arg	Asp	Gly	Asp	Phe	Ile	Cys	Pro	100	105	110	
Asp	Tyr	Tyr	Glu	Ala	Val	Cys	Gly	Thr	Asp	Gly	Lys	Thr	Tyr	Asp	Asn	115	120	125	
Arg	Cys	Ala	Leu	Cys	Ala	Glu	Asn	Ala	Lys	Thr	Gly	Ser	Gln	Ile	Gly	130	135	140	
Val	Lys	Ser	Glu	Gly	Glu	Cys	Lys	Ser	Ser	Asn	Pro	Glu	Gln	Asp	Val	145	150	155	160
Cys	Ser	Ala	Phe	Arg	Pro	Phe	Val	Arg	Asp	Gly	Arg	Leu	Gly	Cys	Thr	165	170	175	
Arg	Glu	Asn	Asp	Pro	Val	Leu	Gly	Pro	Asp	Gly	Lys	Thr	His	Gly	Asn	180	185	190	
Lys	Cys	Ala	Met	Cys	Ala	Glu	Leu	Phe	Leu	Lys	Glu	Ala	Glu	Asn	Ala	195	200	205	
Lys	Arg	Glu	Gly	Glu	Thr	Arg	Ile	Arg	Arg	Asn	Ala	Glu	Lys	Asp	Phe	210	215	220	
Cys	Lys	Glu	Tyr	Glu	Lys	Gln	Val	Arg	Asn	Gly	Arg	Leu	Phe	Cys	Thr	225	230	235	240
Arg	Glu	Ser	Asp	Pro	Val	Arg	Gly	Pro	Asp	Gly	Arg	Met	His	Gly	Asn	245	250	255	
Lys	Cys	Ala	Leu	Cys	Ala	Glu	Ile	Phe	Lys	Arg	Arg	Phe	Ser	Glu	Glu	260	265	270	
Asn	Ser	Lys	Thr	Asp	Gln	Asn	Leu	Gly	Lys	Ala	Glu	Glu	Lys	Thr	Lys	275	280	285	
Val	Lys	Arg	Glu	Ile	Val	Lys	Leu	Cys	Ser	Gln	Tyr	Gln	Asn	Gln	Ala	290	295	300	
Lys	Asn	Gly	Ile	Leu	Phe	Cys	Thr	Arg	Glu	Asn	Asp	Pro	Ile	Arg	Gly	305	310	315	320

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Pro	Asp	Gly	Lys	Met	His	Gly	Asn	Leu	Cys	Ser	Met	Cys	Gln	Val	Tyr	325	330	335
Phe	Gln	Ala	Glu	Asn	Glu	Glu	Lys	Lys	Lys	Ala	Glu	Ala	Arg	Ala	Arg	340	345	350
Asn	Lys	Arg	Glu	Ser	Gly	Lys	Ala	Thr	Ser	Tyr	Ala	Glu	Leu	Cys	Asn	355	360	365
Glu	Tyr	Arg	Lys	Leu	Val	Arg	Asn	Gly	Lys	Leu	Ala	Cys	Thr	Arg	Glu	370	375	380
Asn	Asp	Pro	Ile	Gln	Gly	Pro	Asp	Gly	Lys	Val	His	Gly	Asn	Thr	Cys	385	390	395
Ser	Met	Cys	Glu	Val	Phe	Phe	Gln	Ala	Glu	Glu	Glu	Glu	Lys	Lys	Lys	405	410	415
Lys	Glu	Gly	Glu	Ser	Arg	Asn	Lys	Arg	Gln	Ser	Lys	Ser	Thr	Ala	Ser	420	425	430
Phe	Glu	Glu	Leu	Cys	Ser	Glu	Tyr	Arg	Lys	Ser	Arg	Lys	Asn	Gly	Arg	435	440	445
Leu	Phe	Cys	Thr	Arg	Glu	Asn	Asp	Pro	Ile	Gln	Gly	Pro	Asp	Gly	Lys	450	455	460
Met	His	Gly	Asn	Thr	Cys	Ser	Met	Cys	Glu	Ala	Phe	Phe	Gln	Gln	Glu	465	470	475
Glu	Arg	Ala	Arg	Ala	Lys	Ala	Lys	Arg	Glu	Ala	Ala	Lys	Glu	Ile	Cys	485	490	495
Ser	Glu	Phe	Arg	Asp	Gln	Val	Arg	Asn	Gly	Thr	Leu	Ile	Cys	Thr	Arg	500	505	510
Glu	His	Asn	Pro	Val	Arg	Gly	Pro	Asp	Gly	Lys	Met	His	Gly	Asn	Lys	515	520	525
Cys	Ala	Met	Cys	Ala	Ser	Val	Phe	Lys	Leu	Glu	Glu	Glu	Glu	Lys	Lys	530	535	540
Asn	Asp	Lys	Glu	Glu	Lys	Gly	Lys	Val	Glu	Ala	Glu	Lys	Val	Lys	Arg	545	550	555
Glu	Ala	Val	Gln	Glu	Leu	Cys	Ser	Glu	Tyr	Arg	His	Tyr	Val	Arg	Asn	565	570	575
Gly	Arg	Leu	Pro	Cys	Thr	Arg	Glu	Asn	Asp	Pro	Ile	Glu	Gly	Leu	Asp	580	585	590
Gly	Lys	Ile	His	Gly	Asn	Thr	Cys	Ser	Met	Cys	Glu	Ala	Phe	Phe	Gln	595	600	605
Gln	Glu	Ala	Lys	Glu	Lys	Glu	Arg	Ala	Glu	Pro	Arg	Ala	Lys	Val	Lys	610	615	620
Arg	Glu	Ala	Glu	Lys	Glu	Thr	Cys	Asp	Glu	Phe	Arg	Arg	Leu	Leu	Gln	625	630	635
Asn	Gly	Lys	Leu	Phe	Cys	Thr	Arg	Glu	Asn	Asp	Pro	Val	Arg	Gly	Pro	645	650	655

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Asp Gly Lys Thr His Gly Asn Lys Cys Ala Met Cys Lys Ala Val Phe
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 Gln Lys Glu Asn Glu Glu Arg Lys Arg Lys Glu Glu Glu Asp Gln Arg
 675 680 685
 Asn Ala Ala Gly His Gly Ser Ser Gly Gly Gly Gly Gly Asn Thr Gln
 690 695 700
 Asp Glu Cys Ala Glu Tyr Gln Glu Gln Met Lys Asn Gly Arg Leu Ser
 705 710 715 720
 Cys Thr Arg Glu Ser Asp Pro Val Arg Asp Ala Asp Gly Lys Ser Tyr
 725 730 735
 Asn Asn Gln Cys Thr Met Cys Lys Ala Lys Leu Glu Arg Glu Ala Glu
 740 745 750
 Arg Lys Asn Glu Tyr Ser Arg Ser Arg Ser Asn Gly Thr Gly Ser Glu
 755 760 765
 Ser Gly Lys Asp Thr Cys Asp Glu Phe Arg Ser Gln Met Lys Asn Gly
 770 775 780
 Lys Leu Ile Cys Thr Arg Glu Ser Asp Pro Val Arg Gly Pro Asp Gly
 785 790 795 800
 Lys Thr His Gly Asn Lys Cys Thr Met Cys Lys Glu Lys Leu Glu Arg
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 Glu Ala Ala Glu Lys Lys Lys Lys Glu Asp Glu Asp Arg Ser Asn Thr
 820 825 830
 Gly Glu Arg Ser Asn Thr Gly Glu Arg Ser Asn Asp Lys Glu Asp Leu
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 Cys Arg Glu Phe Arg Ser Met Gln Arg Asn Gly Lys Leu Ile Cys Thr
 850 855 860
 Arg Glu Asn Asn Pro Val Arg Gly Pro Tyr Gly Lys Met His Ile Asn
 865 870 875 880
 Lys Cys Ala Met Cys Gln Ser Ile Phe Asp Arg Glu Ala Asn Glu Arg
 885 890 895
 Lys Lys Lys Asp Glu Glu Lys Ser Ser Ser Lys Pro Ser Asn Asn Ala
 900 905 910
 Lys Asp Glu Cys Ser Glu Phe Arg Asn Tyr Ile Arg Asn Asn Glu Leu
 915 920 925
 Ile Cys Pro Arg Glu Asn Asp Pro Val His Gly Ala Asp Gly Lys Phe
 930 935 940
 Tyr Thr Asn Lys Cys Tyr Met Cys Arg Ala Val Phe Leu Thr Glu Ala
 945 950 955 960
 Leu Glu Arg Ala Lys Leu Gln Glu Lys Pro Ser His Val Arg Ala Ser
 965 970 975
 Gln Glu Glu Asp Ser Pro Asp Ser Phe Ser Ser Leu Asp Ser Glu Met
 980 985 990
 Cys Lys Asp Tyr Arg Val Leu Pro Arg Ile Gly Tyr Leu Cys Pro Lys
 995 1000 1005

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Asp Leu Lys Pro Val Cys Gly Asp Asp Gly Gln Thr Tyr Asn Asn Pro
 1010 1015 1020

Cys Met Leu Cys His Glu Asn Leu Ile Arg Gln Thr Asn Thr His Ile
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Arg Ser Thr Gly Lys Cys Glu Glu Ser Ser Thr Pro Gly Thr Thr Ala
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Ala Ser Met Pro Pro Ser Asp Glu
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<210> 2
 <211> 35
 <212> PRT
 <213> Mamalia

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Glu Asn Asp Pro Val Leu Gly Pro Asp Gly Lys Thr His Gly Asn Lys
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Cys Ala Met
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<210> 3
 <211> 35
 <212> PRT
 <213> Mamalia

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Cys Ser Met
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<210> 4
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 <213> Mamalia

<400> 4
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Cys Ala Met

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35

<210> 5
 <211> 35
 <212> PRT
 <213> Mamalia

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 20 25 30
 Cys Tyr Met
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 <211> 52
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 <213> Mamalia

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 Ser Thr Gly Lys
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 <211> 3528
 <212> DNA
 <213> Mamalia

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<210> 8
 <211> 105
 <212> DNA
 <213> Mamalia

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<210> 9
 <211> 105
 <212> DNA
 <213> Mamalia

<400> 9

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<210> 10
<211> 99
<212> DNA
<213> Mamalia

<400> 10
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<210> 11
<211> 105
<212> DNA
<213> Mamalia

<400> 11
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<211> 156
<212> DNA
<213> Mamalia

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